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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/798,790	03/11/2004	Satish Mahadeorao Totey	REL494/4-002US/58000	5605
²¹⁵⁸⁶ VINSON & EI	VINSON & ELKINS, L.L.P. 1001 FANNIN STREET 2300 FIRST CITY TOWER EXAMINER GAMETT, DANIEL C		INER	
1001 FANNIN			DANIEL C	
			ART UNIT	PAPER NUMBER
•			1647	
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SHORTENED STATUTOR	RY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE	
31 E	DAYS	04/09/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary TOTEY ET AL. Examiner Daniel C. Gamett, PhD Da		Applicant(s)	Application No.				
Daniel C. Gamett, PhD 1647 - The MAILING DATE of this communication appears on the cover sheet with the correspondence address → Period for Repty A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION. In the state of the may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely liked after SIX (8) MONTHS from the mailing date of this communication. If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (8) MONTHS from the mailing date of this communication. Failure to reply within the set or extended period for regly well, by statute, cause the application to become ABANDONES (35 U.S.C. § 133). Any reply received by the Official set than three months after the mailing date of this communication, even if timely fitted, may reduce any seamed patent term sejusament. See 37 CFR 1.704(b). Status 1) □ Responsive to communication(s) filled on 11 March 2004. 2a) □ This action is FINAL. 2b) □ This action is non-final. 3) □ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213. Disposition of Claims 4) □ Claim(s) 1-44 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5) □ Claim(s) is/are allowed. 6) □ Claim(s) is/are allowed. 7) □ Claim(s) is/are objected to by the Examiner. Application Papers 9) □ The specification is objected to by the Examiner. Application Papers 9) □ The path or declaration is objected to by the Examiner. Application Papers 9) □ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152. Priority under 35 U.S.C. § 119 10 □ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). 11 □ Certified c	,	TOTEY ET AL.	10/798,790	Office Action Summary			
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 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 	a)[
Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date 5) Notice of Informal Patent Application Paper No(s)/Mail Date 6) Other:	·	s)/Mail Date	Paper No(s)/Mail 5) Notice of Informal	ce of References Cited (PTO-892) ce of Draftsperson's Patent Drawing Review (PTO-948) mation Disclosure Statement(s) (PTO/SB/08)	1) Notice 2) Notice 3) Inform		

Application/Control Number: 10/798,790 Page 2

Art Unit: 1647

DETAILED ACTION

Election/Restrictions

- 1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 1-4, drawn to a differentiated cell population in an in vitro culture obtained by differentiating primate pluripotent stem cells, wherein at least 60% of the differentiated cells are dopaminergic neurons, classified in class 435, subclass 363.
 - II. Claims 5-39, drawn to methods of generating a differentiated neural cell population from primate pluripotent stem cells, classified in class 435, subclass 377.
 - III. Claims 40-44, drawn to methods of treating a patient with a neurodegenerative disorder or neuronal disease, classified in class 424, subclass 93.1.

The inventions are distinct, each from the other because of the following reasons:

2. Inventions II and I are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make another and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case, the claimed process can alternatively produce populations of differentiated cells comprising at least 30% serotonergic neurons or 25% oligodendrocytes (claims 10 and 11). A population possessing both of these characteristics would necessarily be materially different from a population wherein at least 60% of the differentiated cells are dopaminergic neurons.

Application/Control Number: 10/798,790 Page 3

Art Unit: 1647

3. Inventions I and III are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (1) the process for using the product as claimed can be practiced with another materially different product or (2) the product as claimed can be used in a materially different process of using that product. See MPEP § 806.05(h). In the instant case neuronal diseases can be treated with products other than dopaminergic cells derived from pluripotent stem cells.

- 4. Inventions II and III are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). The different modes of operation, different functions, or different effects are evident from the descriptions of the groups: Invention II is a method of differentiating cells in culture whereas Invention III is a method of treating disease.
- 5. Because these inventions are independent or distinct for the reasons given above and have acquired a separate status in the art in view of their different classification, restriction for examination purposes as indicated is proper.
- 6. Applicant is advised that the reply to this requirement to be complete must include (i) an election of a species or invention to be examined even though the requirement be traversed (37 CFR 1.143) and (ii) identification of the claims encompassing the elected invention.
- 7. The election of an invention or species may be made with or without traverse. To reserve a right to petition, the election must be made with traverse. If the reply does not distinctly and specifically point out supposed errors in the restriction requirement, the election shall be treated

Application/Control Number: 10/798,790

Art Unit: 1647

as an election without traverse. Should applicant traverse on the ground that the inventions or species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the inventions or species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C.103(a) of the other invention.

Page 4

- 8. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).
- 9. The examiner has required restriction between product and process claims. Where applicant elects claims directed to the product, and a product claim is subsequently found allowable, withdrawn process claims that depend from or otherwise include all the limitations of the allowable product claim will be rejoined in accordance with the provisions of MPEP § 821.04. Process claims that depend from or otherwise include all the limitations of the patentable product will be entered as a matter of right if the amendment is presented prior to final rejection or allowance, whichever is earlier. Amendments submitted after final rejection are governed by 37 CFR 1.116; amendments submitted after allowance are governed by 37 CFR 1.312.
- 10. In the event of rejoinder, the requirement for restriction between the product claims and the rejoined process claims will be withdrawn, and the rejoined process claims will be fully examined for patentability in accordance with 37 CFR 1.104. Thus, to be allowable, the rejoined claims must meet all criteria for patentability including the requirements of 35 U.S.C. 101, 102, 103, and 112. Until an elected product claim is found allowable, an otherwise proper restriction requirement between product claims and process claims may be maintained. Withdrawn process claims that are not commensurate in scope with an allowed product claim will not be rejoined. See "Guidance on Treatment of Product and Process Claims in light of In re Ochiai, In re Brouwer and 35 U.S.C. § 103(b)," 1184 O.G. 86 (March 26, 1996). Additionally, in order to retain the right to rejoinder in accordance with the above policy, Applicant is advised that the process claims should be amended during prosecution either to maintain dependency on the

Art Unit: 1647

product claims or to otherwise include the limitations of the product claims. Failure to do so may result in a loss of the right to rejoinder. Further, note that the prohibition against double patenting rejections of 35 U.S.C. 121 does not apply where the restriction requirement is withdrawn by the examiner before the patent issues. See MPEP § 804.01.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel C Gamett, Ph.D., whose telephone number is 571 272 1853. The examiner can normally be reached on M-F, 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brenda Brumback can be reached on 571 272 0961. The fax phone number for the organization where this application or proceeding is assigned is 571 273 8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

DCG Art Unit 1647 28 March 2007

DAVID S. ROMEO

PRIMARY EXAMINER